

## Suspect Components List

This list is current as of the date of this publication. For the latest information, view Appendix B in the latest Suspect/ Counterfeit Items "Analysis and Training Report", (<http://twilight.saic.com/qawg/scitrend/contents.htm>).

NOTE: It is not necessarily a negative reflection on a supplier or manufacturer if S/CI are reported regarding its particular product. Reputable manufacturers and suppliers have a vital interest in preventing the manufacture or distribution of S/CI associated with themselves. It may very well be that the supplier or manufacturer was victimized and is pursuing S/CI associated with its products in an aggressive, prudent, and professional manner in order to get such items off the market. Therefore, each particular case regarding the manufacture or supply of S/CI must be examined on its own merit without making premature conclusions regarding fault or culpability of the manufacturer or supplier whose name is associated with the S/CI. In short, what follows is a "suspect components list" and not a "suspect manufacturer or supplier list." The manufacturer or supplier identified in the following table should not be considered to have engaged in any wrongdoing without additional information.

Suspect Component List				
Component	Manufacturer/ Type	Description	Supplier	References
Circuit Breakers	General Electric (Component Examples)  <ul style="list-style-type: none"> <li>● AKF-2-25</li> <li>● EC Trip Types</li> <li>● AK (All Types)</li> </ul>	Metal clad, low voltage, DC	Satin America & Circuit Breaker Systems Inc.	NRC I.N. 89-45, Supplements and Attachments SENS Report ID #6 5/23/89
Circuit Breakers	General Electric (Component Examples)  <ul style="list-style-type: none"> <li>● KHL-36 125</li> <li>● THEF 136050</li> <li>● AK-2-75-3</li> <li>● AK-2</li> <li>● AK-1-50</li> <li>● AK-1-75</li> <li>● B</li> <li>● TDQ</li> <li>● TCVVFS</li> <li>● TFJ</li> <li>● TEB122015-WL</li> <li>● TEB132090-WL</li> <li>● TE111015</li> <li>● TED134060-WL</li> <li>● TEB124050-WL</li> <li>● THED136100 WL</li> <li>● TED126050</li> <li>● THED136060 WL</li> <li>● THGB2120</li> <li>● TEF134015</li> <li>● THEF136M1100</li> <li>● TED 134030-WL</li> <li>● AK2A25</li> <li>● THED-136100-WL</li> <li>● THED-136050-WL</li> <li>● THED-136045-WL</li> <li>● THFK-236070-WL</li> <li>● TE-122070</li> <li>● THED-136150-WL</li> </ul>	1,2, & 3 pole, various amperages	Bud Ferguson's Industrial Control & Supply, Inc.  General Circuit Breaker & Electrical Supply.  HLC Electric Supply  California Breakers, Inc.  PENCON International (DBA) General Magnetics/Electric Wholesale,  ANTI THEFT Systems, Inc. (DBA) ATS Circuit Breakers and AC Circuit Breaker Electrical Supply	NRC I.N. 88-46 Supplements and Attachments  NRC I.N. 90-46

## APPENDIX B

Suspect Component List				
Component	Manufacturer/ Type	Description	Supplier	References
	<ul style="list-style-type: none"> <li>● THED-13600-WL</li> <li>● TED-113020</li> <li>● TEC-36050</li> <li>● THED-124015-WL</li> <li>● TFI 36090</li> </ul>			Office of Nuclear Safety 93-5 (#11)
Circuit Breakers	Westinghouse (Component Examples)			
	<ul style="list-style-type: none"> <li>● Not Provided</li> <li>● DB-25 &amp; DS-416</li> <li>● FSN-5925-628-0641</li> <li>● DB-25</li> <li>● DB-50</li> <li>● HKB3150T</li> <li>● FB3020</li> <li>● FB3070</li> <li>● FB3050</li> <li>● EHB3025</li> <li>● LBB3125</li> <li>● HKA31250</li> <li>● JA3200</li> <li>● EHB2100</li> <li>● 225N</li> <li>● EB 1020</li> <li>● HDEA 2030</li> <li>● MCP331100R</li> <li>● MCP431550CR</li> <li>● BAB3060H</li> <li>● 656D14 8G03</li> <li>● FA-2100</li> <li>● EH-2050</li> <li>● HFB-3050</li> <li>● HFD(B)-3020</li> <li>● MA3600</li> <li>● F2020</li> <li>● EH2100</li> <li>● EB3050</li> <li>● HMC3800F</li> <li>● EA2090</li> <li>● FA3125</li> <li>● HMCP 150</li> <li>● HFD</li> </ul>	<p>Commercial Grade</p> <p>Low Voltage</p> <p>Trip units; Navy trip units; 1, 2, &amp; 3 pole various amp. ratings</p>	<p>Westinghouse Electric Supply Co. (WESCO)</p> <p>Satin America &amp; Circuit Breaker Systems, Inc.</p> <p>General Circuit Breaker &amp; Electrical Supply</p> <p>HLC Electrical Supply</p> <p>California Breakers, Inc.</p> <p>PENCON International (DBA) General Magnetics/Electric Wholesale</p> <p>ANTI THEFT Systems, Inc. (DBA) ATS Circuit Breakers and AC Circuit Breaker - Electrical Supply</p>	<p>NRC I.N. 91-48</p> <p>NRC I.N. 89-45 &amp; Supplement #2</p> <p>NRC I.N. 88-46, Supplements and Attachments</p> <p>Office of Nuclear Safety 93-9</p>
Circuit Breakers	Westinghouse (Cont.) (Component Examples)	Shunt Trips Aux. Contacts 2 & 3 pole circuit breakers of various amperages	<p>General Circuit Breaker &amp; Electrical Supply</p> <p>HLC Electrical Supply</p> <p>PENCON International (DBA) General</p>	<p>NRC I.N. 88046, Supplements and Attachments</p>

Suspect Component List				
Component	Manufacturer/ Type	Description	Supplier	References
Circuit Breakers	<ul style="list-style-type: none"> <li>• CAH3200</li> <li>• EHB3040</li> <li>• JL3-B150</li> <li>• JL3-B200</li> <li>• JL3-B090</li> <li>• JL3-B1000</li> <li>• HFA, HFB, FA</li> <li>• JL3-(B)8070</li> <li>• JL3-B125</li> <li>• EH-2020</li> <li>• FA-3035</li> <li>• EH-2050</li> <li>• FA-2100</li> <li>• FA-2050</li> <li>• HFB-3050</li> <li>• JA-2225</li> <li>• HLM3800T</li> <li>• F3100N</li> <li>• MA3500</li> <li>• EH2015</li> <li>• LA3200WL</li> <li>• HLA3200T</li> <li>• 2602D58U9</li> <li>• HLB3200T</li> <li>• 262156G19</li> <li>• EHB2100</li> <li>• 1A &amp; 1B</li> <li>• HL3800T</li> </ul> <ul style="list-style-type: none"> <li>• MDL#KAF</li> <li>• QNB3020</li> <li>• QNB3030</li> <li>• BA</li> <li>• BA</li> <li>• E3060</li> </ul>	225 amp, 3 pole 3 pole, 20 amp 3 pole, 30 amp 1 pole, 20 & 30 amp 2 pole, 20 & 30 amp 3 pole, 60 amp	Not Provided	SENS ID #10 3-17-89 SENS ID #11 3-3-89
Circuit Breakers	F3020	3 pole, 20 amp	Not Provided	SENS Report ID #12 10-19-88 NRC I.N. 88-48
Circuit Breakers	ITE (Component Examples) <ul style="list-style-type: none"> <li>• Model - E43B015</li> <li>• EQ-B</li> <li>• EF3B070</li> <li>• EF3H050</li> <li>• EF3B125</li> <li>• EF3B040</li> </ul>	3-phase 480 volt  1 pole, 20 amp  2 & 3 various amperages	Cal. Breakers/Elect. Wholesale Supply Co.  Not Provided  General Circuit Breaker & Electrical Supply  HLC Electrical Supply	SENS Report ID #8, 5-5-89  SENS ID #10, 3-17-89 SENS ID #11, 3-3-89  NRC I.N. 88-46, Supplements and Attachments

Suspect Component List				
Component	Manufacturer/ Type	Description	Supplier	References
	<ul style="list-style-type: none"> <li>● E42B020</li> <li>● QJ2B200</li> <li>● JL3B400</li> <li>● HE9B040</li> <li>● EE3B050</li> <li>● BQ2B030</li> <li>● EE3B070</li> <li>● EE2B100</li> <li>● EE2B050</li> <li>● EE2B030</li> <li>● FJ3B225</li> <li>● ET</li> <li>● KA</li> <li>● EH-313015</li> <li>● JL-3B070</li> <li>● JL-3B150</li> <li>● E43B015</li> <li>● EF2-B030</li> <li>● EH3B100</li> <li>● CP1B020</li> <li>● QJ3B200</li> <li>● EF3B100</li> <li>● 1193</li> </ul>		California Breakers, Inc. PENCON International (DBA) General Magnetics/ Electric Wholesale ANTI THEFT Systems, Inc. (DBA) ATS Circuit Breakers and AC Circuit Breaker-Electrical Supply	
Circuit Breakers	ITE, Gould & ITE Imperial  Brown Boveri Elect. (BBE) ASEA Brown Boveri (Component Examples) <ul style="list-style-type: none"> <li>● Type HK</li> <li>● 5 HK</li> <li>● 7.5 HK</li> <li>● 15 HK</li> <li>● 38 HK</li> <li>● ITE 62-6</li> </ul>	Not Provided ID 4-KV Not Provided Not Provided Not Provided	Brown Boveri ASEA Brown Boveri	NRC I.N. 89-86 NRC I.N. 87-41 Office of Nuclear Safety, 92-25
Circuit Breakers	Square "D" Co. Component Examples <ul style="list-style-type: none"> <li>● KHL 36125 (Any Type)</li> </ul>	Molded Case	General Circuit Breaker & Electrical Supply  HLC Electric Supply  California Breakers, Inc.  PENCON International (DBA) General Magnetics/Electric Wholesale  ANTI THEFT Systems Inc. (DBA) ATS Circuit Breakers and AC Circuit Breaker - Electrical Supply	NRC I.N. 88-46, Supp. & Attach.  NRCB 88-10  NCR I.N. 90-46

Suspect Component List				
Component	Manufacturer/ Type	Description	Supplier	References
	<ul style="list-style-type: none"> <li>● QOB220</li> <li>● QO220</li> <li>● LO-3</li> <li>● SBW-12</li> <li>● 989316</li> <li>● FAL3650-16M or</li> <li>● FAL36050-16M</li> <li>● KA36200</li> <li>● 999330</li> <li>● EHB3025</li> </ul> <p>Manufacturer not provided</p>	<p>1 pole, 15 amp</p> <p>2 &amp; 3 pole 20 &amp; 50 amp breakers</p> <p>3 pole - 200 amp breaker</p> <p>30A/600V</p> <p>Not Provided</p>	<p>Not Provided</p> <p>General Circuit Breaker &amp; Electrical Supply</p> <p>HLC Electric Supply</p> <p>California Breakers, Inc. PENCON International (DBA) General Magnetics/Electric Wholesale</p> <p>ANTI-THEFT Systems, Inc. (DBA) ATS Circuit Breakers and AC Circuit Breaker - Electrical Supply</p> <p>Stokely Enterprises</p>	<p>SENS ID #10 3-17-89</p> <p>NRC I.N. 89-45 &amp; Supplement #2</p> <p>DOE Letter 8-26-91 Reprinted "NuVEP: Bulletin 7-26-91"</p>
Circuit Breakers	<p>Fed. Pacific (Component Examples)</p> <ul style="list-style-type: none"> <li>● NEF431020R</li> <li>● NE111020</li> <li>● NE</li> <li>● NF63-1100</li> <li>● NE22-4060</li> <li>● NE22-4100</li> <li>● NEF-433030</li> <li>● 2P125</li> </ul> <p>Jefferson (Component Examples)</p>	<p>3 pole, 20 amp</p> <p>1 pole, 20 amp</p> <p>1 pole, 15 amp</p> <p>1, &amp; 3 pole - 30, 60 &amp; 100 amp breakers</p> <p>Not Provided</p>	<p>General Circuit Breaker &amp; Electrical Supply</p> <p>HLC Electric Supply</p> <p>California Breakers, Inc.</p> <p>PENCON International (DBA) General Magnetics/Electric Wholesale</p> <p>ANTI THEFT Systems, Inc. (DBA) ATS Circuit Breakers and AC Circuit Breaker - Electrical Supply</p> <p>General Circuit Breaker &amp; Electrical Supply</p> <p>HLC Electric Supply</p> <p>California Breakers, Inc.</p> <p>PENCON International (DBA) General Magnetics/Electric Wholesale</p> <p>ANTI THEFT Systems,</p>	<p>SENS ID. #10 3-17-89</p> <p>SENS ID. #11 3-3-89</p> <p>NRC I.N. 88-46, Supp. &amp; Attach.</p> <p>NRC I.N. 88-46, Supp. &amp; Attach.</p>

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Suspect Component List				
Component	Manufacturer/ Type	Description	Supplier	References
			Inc. (DBA) ATS Circuit Breakers and AC Circuit Breaker - Electrical Supply	
Circuit Breakers	Superior (Component Examples) <ul style="list-style-type: none"> <li>● 246U-3</li> </ul> Cutler Hammer (Component Examples) <ul style="list-style-type: none"> <li>● 10177H13</li> <li>● 10177H21</li> <li>● 10177H32</li> <li>● 10177H1036</li> <li>● 1077H1049</li> </ul>	Not Provided  Not Provided	General Circuit Breaker & Electrical Supply  HLC Electric Supply  California Breakers, Inc.  PENCON International (DBA) General Magnetics/Electric Wholesale  ANTI THEFT Systems, Inc. (DBA) ATS Circuit Breakers and AC Circuit Breaker - Electrical Supply  General Circuit Breaker & Electrical Supply  HLC Electrical Supply  California Breakers, Inc.  PENCON International (DBA) General Magnetics/Electric Wholesale  ANTI THEFT Systems, Inc. (DBA) ATS Circuit Breakers and AC Circuit Breaker - Electrical Supply	NRC I.N. 88-46, Supp. & Attach.  NRC I.N. 88-46, Supp. & Attach.
Circuit Breakers	Manufacturer Not Provided (Component Examples) 50DHP250	2 pole - 50 amp	General Circuit Breaker & Electrical Supply  HLC Electric Supply  California Breakers, Inc.  PENCON International (DBA) ATS Circuit Breakers and AC Circuit Breaker - Electrical Supply	NRC I.N. 88-46, Supp. & Attach.

Suspect Component List				
Component	Manufacturer/ Type	Description	Supplier	References
Switches	(Component Examples)  Crouse Hinds #EDSC2129  Sq. D Type G, Class 9012, 9025, 9016	Tumbler, ft. op.	Platt Electric Supply Co.  Gen. Motors, Electro-Motive Design	SENS ID #16 1-27-92  Office of Nuclear Safety 93-24 & 93-27
Transmitters	Rosemount	(Component Examples)  ● Model 1151 GP ● Model 1151 DP	Venetech	E.L. Wilmot letter dated 8-1-91
Motors	Siemen & Allis (Component Examples)  INP 143 T 215 T	10 H.P.	General Circuit Breaker & Electrical Supply  HLC Electric Supply  California Breakers, Inc.  PENCON International (DBA) General Magnetics/Electric Wholesale  ANTI THEFT Systems, Inc. (DBA) ATS Circuit Breakers and AC Circuit Breaker - Electrical Supply	NRC I.N. 88-46, Supplements and Attachments
Relays	Potter & Brumfield (Component Examples)  MDR-138, 173-1, 134-1, 142-1  Teledyne  G.E. & Exide (Component Examples)  ● 12HGA-11S52 ● NX 400	Not-latching rotary  All qualified to MIL-R-28776 and MIL-R-39016  Overload & Aux.	Stokely Enterprises  Not Provided  General Circuit Breaker & Electrical Supply  HLC Electric Supply  California Breakers, Inc.  PENCON International (DBA) General	NRC I.N. 90-57 & Attach.  DOE-ID Wilmot letter, 7-16-91

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Suspect Component List				
Component	Manufacturer/ Type	Description	Supplier	References
	<p>Manufacturer not provided</p> <ul style="list-style-type: none"> <li>● FSC-5945 Amerace (or Agastat) (Component Examples)</li> </ul> <p>Models:</p> <ul style="list-style-type: none"> <li>● E7024</li> <li>● E7022</li> <li>● A through L Series</li> <li>● Model 7032</li> </ul>	<p>Not Provided</p> <p>Electro Pneumatic Timing Relays</p> <p>PRB</p>	<p>Magnetics/Electric Wholesale</p> <p>ANTI THEFT Systems, Inc. (DBA) ATS Circuit Breakers and AC Circuit Breaker - Electrical Supply</p> <p>Stokely Enterprises</p> <p>Amerace</p> <p>Control Components Supply</p>	<p>DOE Letter 8-26-91 Reprinted "NuVEP": Bulletin 7-26-91</p> <p>SENS ID #1 11-1-91</p> <p>NRC I.N. 92-24</p>
Fuses	<p>Bussman Co. (Component Examples)</p> <p>REN 15 &amp; NOS-30</p> <p>Class 1E</p>	<p>15A-250V &amp; 30A-600V</p>	<p>General Circuit Breaker &amp; Electrical Supply</p> <p>HLC Electric Supply</p> <p>California Breakers, Inc.</p> <p>PENCON International (DBA) General Magnetics/Electric Wholesale</p> <p>ANTI THEFT Systems, Inc. (DBA) ATS Circuit Breakers and AC Circuit Breaker - Electrical Supply</p> <p>All Supplied by PMS</p> <p>Preventive Maintenance Systems (PMS)</p>	<p>NRC I.N. 88-46, Supp. &amp; Attach.</p>
Controllers	<p>Manufacturer Not Listed (Component Examples)</p> <p>FSC 6110</p>	Motor Controllers	<p>Stokely Distributors &amp; Stokely Enterprises, Inc.</p>	<p>DOE letter 8-26-91 &amp; NUVEP Bulletin 7-26-91</p>
Starters	Westinghouse (Component Examples)	Not Provided	<p>General Circuit Breaker &amp; Electrical Supply</p> <p>HLC Electric Supply</p> <p>California Breakers, Inc.</p>	<p>NRC I.N. 88-46 Supp. &amp; Attach.</p>

Suspect Component List				
Component	Manufacturer/ Type	Description	Supplier	References
			PENCON International (DBA) General Magnetics/Electric Wholesale  ANTI THEFT Systems, Inc. (DBA) ATS Circuit Breakers and AC Circuit Breaker - Electrical Supply	
Resistors	Unknown	All	Impala Electronics	NRC I.N. 91-01
Semiconductors	Solid State Devices Inc. (SSDI) SFF 9140	P-Channel MOSFET	SSDI	DOE Albuquerque Letter, 06-25-96 to DOD Inspector General
	SPD 1511-1-11	Pin Diode (SA3059)		
	2A14/18 or 2A14/52	Ion Implanted Diode		
	SSR4045CTTXV	SCHOTTKY Diodes		
	SFF9140TWX	Power Transistors		
	SPMF106ANH	Special Pack MOSFET Switch		
	SPMF106ANH	Axial Leaded SCHOTTKY Diode		
	SPD 5818 or IN5858JTXV 2N797	Transistor  Diode (SA 3436)		
Starter Controls	Westinghouse (Component Examples)	Not Provided	General Circuit Breaker & Electrical Supply	NRC I.N. 88-48
	• A200MICAC		HLC Electric Supply	
	• A201KICA			
	• A201K2Ca		California Breakers, Inc. PENCON International (DBA) General Magnetics/Electric Wholesale	
	• AN13A		ANTI THEFT Systems,	

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Suspect Component List				
Component	Manufacturer/ Type	Description	Supplier	References
			Inc. (DBA) ATS Circuit Breakers and AC Circuit Breaker - Electrical Supply	
Gauge Glasses	Siemen & Allis (Component Examples)  #00-737-637-118 215 T	Not Provided	Rosen Electric Co.	NRC I.N. 88-46 Supp. & Attach.
Mercury Lamps	Spectro Inc. (Component Examples)  V00014	Not Provided	General Circuit Breaker & Electrical Supply  HLC Electric Supply  California Breakers, Inc.  PENCON International (DBA) General Magnetics/Electric Wholesale  ANTI THEFT Systems, Inc. (DBA) ATS Circuit Breakers and AC Circuit Breaker - Electrical Supply	NRC I.N. 88-46
Electrical Frames	Westinghouse (Component Examples)  KB3250F	Not Provided	General Circuit Breaker & Electrical Supply  HLC Electric Supply  California Breakers, Inc.  PENCON International (DBA) General Magnetics/Electric Wholesale  ANTI THEFT Systems, Inc. (DBA) ATS Circuit Breakers and AC Circuit Breaker - Electrical Supply	NRC I.N. 88-46
Pushbutton Station	Crouse Hinds (Component Examples)  #00-737-637-118	Single gang, push button	Platt Electric Supply Co.	SENS Report ID #16 1-27-92
Overload Relay Thermal Unit	Square D (Component Examples)  B19.5, B22	Not Provided	Not Provided	NRC I.N. 88-46
Piping, Fittings Flanges, and Components	Tube-line Corp. Ray Miller, Inc.	Subassemblies, fittings, flanges & other components	Tube-line  Ray Miller, Inc.	NRC IEB 83-06 NRC I.N. 89-18 NRC IEB 83-07 NRC I.N. 83-01

Suspect Component List				
Component	Manufacturer/ Type	Description	Supplier	References
		(Carbon and Stainless Steel components)		
Piping, Fittings, Flanges, and Components	Piping Supplies, Inc. & West Jersey Mfg. & Chews Landing Metal Mfg.	Carbon and Stainless Steel Fittings and Flanges	Piping Supplies, Inc. & West Jersey Mfg. & Chews Landing Metal Mfg.	NRC Bulletin 88-05 & Supplements
Valves	VOGT	Full port design 2- inch Model SW- 13111 & 1023	CMA International IMA Valve Refurbisher	NRC I.N. 88-48 & Supplements
	Crane	4"-1500psi, pressure sealed	Southern Cal. Valve Maintenance Co., Amessee Welding Service & CMA Int.	NRC I.N. 91-09
	ITT Grinnell Valve Co., Inc.	Diaphragm valves	ITT Grinnell Valve Co. Inc. Div. of Diaflo & ITT Engineered Valves	NRC Comp. Bulletin 87-02
	Crane, Pacific, Powell, Walworth & Lunkenheimer	Gate Valves	Coffeyville Valve Inc.	NRC I.N. 92-56
	Pacific	8" & 3" Globe Valve	CMA & IMA Valve Refurbisher	NRC I.N. 88-48, Supp. & Attach.
	Crane Chapman	24" Check Valve	CMA & IMA Valve Refurbisher	NRC I.N. 88-48 Suppl. & Attach.
	Pacific	Check Valve	CMA & IMA Valve Refurbisher	NRC I.N. 88-48 Supp. & Attach.
Valve	Kerotest	8" Valve	CMA & IMA Valve Refurbisher	NRC I.N. 88-48 Supp. & Attach.
	Pacific	4" Gate Valve	CMA & IMA Valve Refurbisher	NRC I.N. 88-48 Supp. & Attach.
	Lukenheimer	6" Model 1542 20" Model 3013	CMA & IMA Valve Refurbisher	NRC I.N. 88-48 Supp. & Attach.
	Crane	All	CMA & IMA Valve Refurbisher	NRC I.N. 88-48 Supp. & Attach.
Flanges	China Ding Zinang Nan Xi Li Flange Co. Shou Gang Mach. Eng. Co.	Flanges, ASTM A105, ASME SA105	Billiongold Co. LTD. Tain Gong Co. Sanxi Province Overseas Trading Corp.	NRC I.N. 92-68 and Attachments  Office of Nuclear Safety 92-25, 93-23, and 92-35
Valve Replacement Parts	Masoneilan-Dresser Industries	Plug stem, stem to plug anti-rotation pin, seat ring, valve plugs, bushings, cages & packing box components	Cor-Val, Control Valve Specialists, H.H. Barnum & M.D. Norwood	NRC I.N. 88-97 Supp. & Attach.

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Component	Manufacturer/ Type	Description	Supplier	References
Pumps & Replacement Parts	Hayward Tyler Pump Co.	HTPC ASME Nuclear Code	Hayward Tyler Pump Co.	IEB 83-05 & Attachments
Channel Members	Unistrut Corporation	Continuously slotted channels, structural framing members, fasteners, nuts, fittings, pipe clamps	Unistrut Corporation	NRC I.N. 91-25
Fire Barriers	Thermal Science Inc.	Thermo-Log 330	None Listed	ES&Q Update #18 NRC I.N. 92-55
Valve Actuator	Limitorque	Eyebolts on housing cover	None Listed	Office of Nuclear Safety 93-25 NRC I.N. 93-37
Steel	Alloy & Carbon Steel Co., Inc., Atlantic Steel Co., Livingston Steel Co., & Copperweld Steel Co.	Plate Angle Flat Bar Bar	Meredith Corporation Pressure Vessel Nuclear Alloy & Carbon Steel Co., Inc.	NRC I.N. 89-56, Attachments and Supplements
Fasteners (Bolts, Screws, Nuts, and Washers)	(parentheses designated head mark)  Asahi (A) Daichi (D) Daiiei (E) Fastener Co. of Japan (FM) Hinomoto Metal (H) Jin Her (J) Kyowa (K) Kosaka Kogyo (KS) Kyoei Minamida Seiyo (M) Mnato Kogyo (MS) Nippon (NF) Takai (RT) Tsukimori (S) Unyite (UNY) Yamadai (Y) Ivaco, Infasco (hollow triangled)	<ul style="list-style-type: none"> <li>● Those with suppliers or manufacturers</li> <li>● Those that are improperly marked</li> <li>● Those of foreign manufacture that do not meet Public Law 101-592, The Fastener Quality Act</li> </ul>	<p>Note: Listed suppliers may also be manufacturers</p> <p>Lawrence Engineering &amp; Supply Co. Metal Building Bolts Nichimin Corporation UNICO Ace Corporation E. K. Fasteners, Inc. H. Y. Port Fasteners Co. Kobayashi Metals, LTD. Takai Screw Mfg. Co. LTD. Yamaguchi Sesakusho Co. LTD. Highland Bolt &amp; Nut Porleous Fastener Co. Northwest Fasteners Ziegler Bolts &amp; Parts Co. Edgewater Fasteners, Inc. Reynolds Fasteners A &amp; G Engineering</p>	<p>Commercial Carrier Journal Articles for: 6/88, 1/90, 2/90, 3/90, 4/90, 6/90, 7/90, 12/90</p> <p>INEL Suspect Headmark List</p> <p>SENS Report #5 2/6/91</p> <p>SENS Report #13 2/6/91</p> <p>HR 3000, U. S. House of Representatives, July 1988</p> <p>"Fastener Technology International," Feb., April, and June 1993</p> <p>Rep. J. Dingell Ltr to Comm. Dept. &amp; NRC, June 18, 1993</p>

Suspect Component List				
Component	Manufacturer/ Type	Description	Supplier	References
				Office of Nuclear Safety 93-26, 93-22, 93-11
Fasteners (Bolts, Screws, Nuts, and Washers)	NUCOR  Any	1-1/4" x 2" Zinc Chromate plated surface Hexhead cap screws  Any	Cordova Bolt, Inc.  Aircom Barnett Bolt Works Bolts & Nuts, Inc. Glasser & Assoc. Knoxville Bolt & Screw Metal Fastener Supply Phoell Mfg. Co. Service Supply Co. Southeastern Bolt & Screw Sure Loc Victory Bolt	SENS ID #13 11-8-91  NRC Compliance Bulletin 87-02 NRC I.N. 89-59